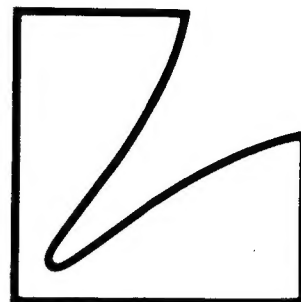


L-235/L-225

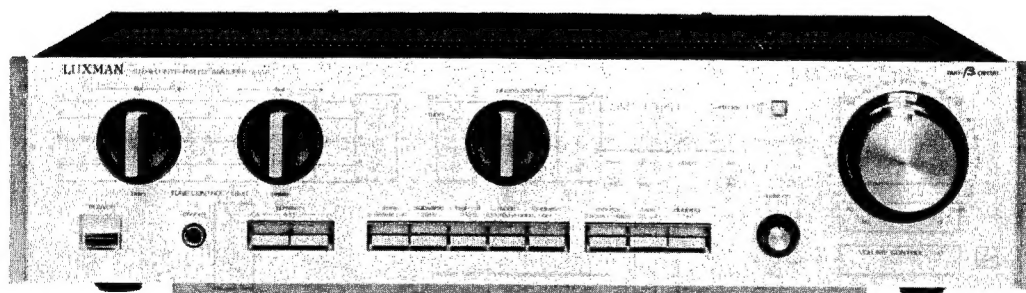
L-235/L-225

SERVICE MANUAL

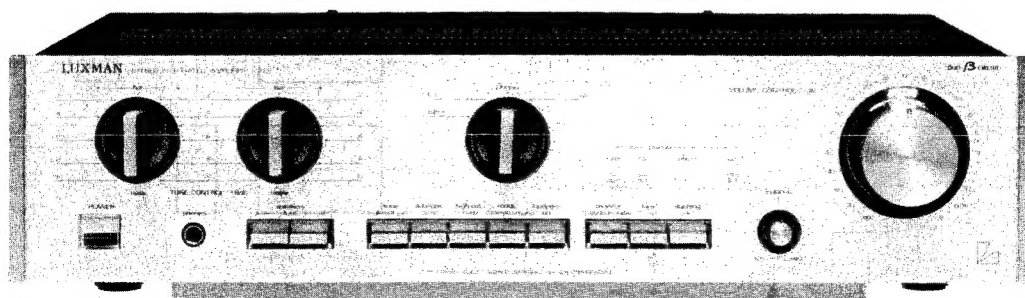


DUO-BETA CIRCUIT STEREO
INTEGRATED AMPLIFIER

L-235
L-225



L-235

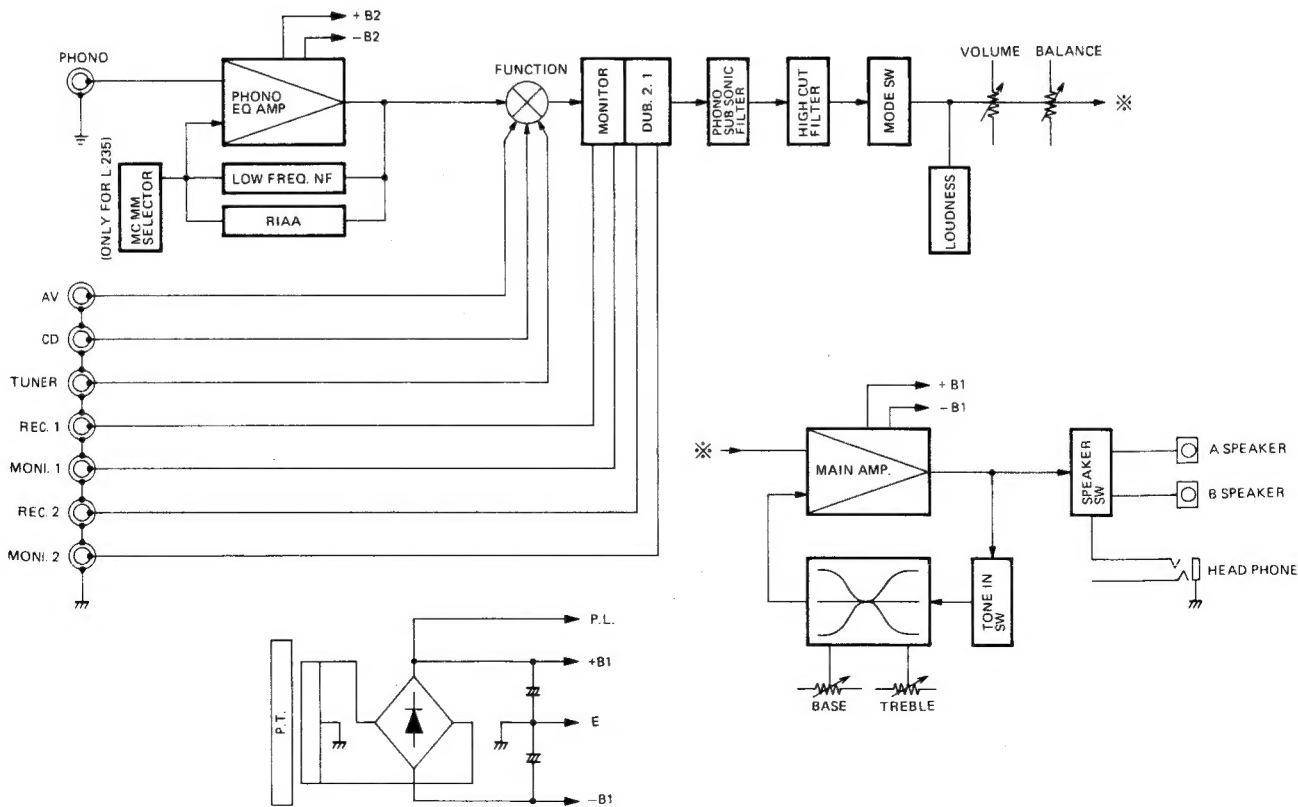


L-225

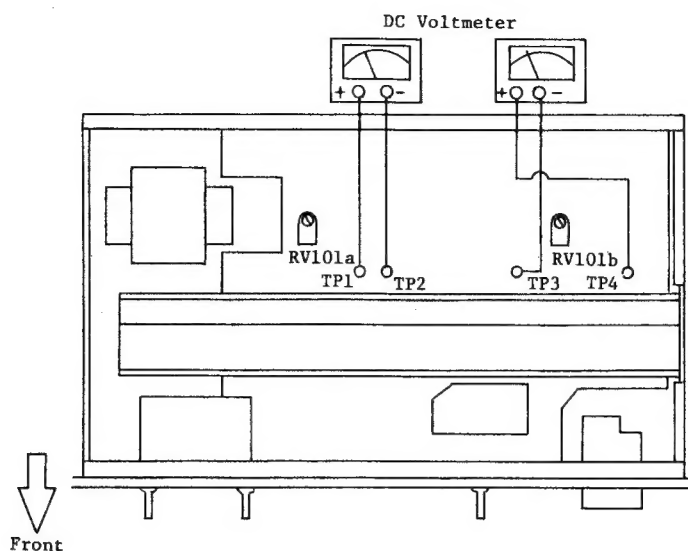
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Block Diagram



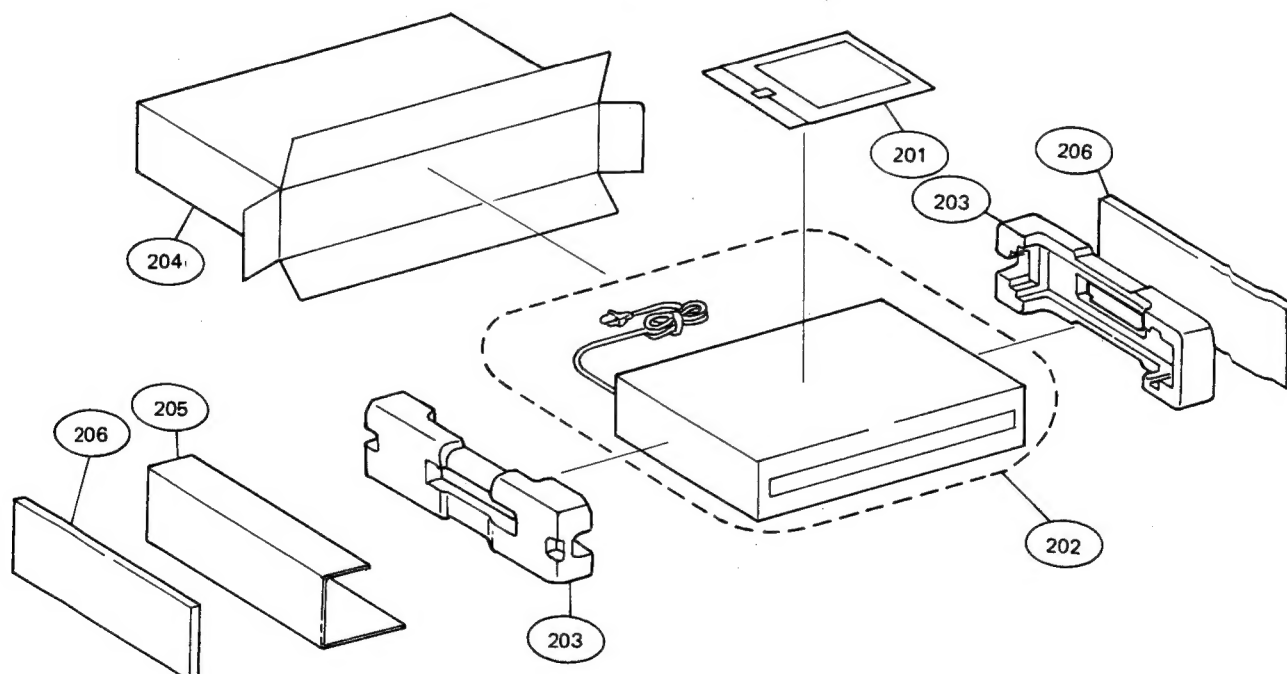
Adjustment Procedures



Bias (Idle) Current Adjustment

1. Connect a DC Voltmeter in between TP1 and TP2 on L-ch and or TP4 and TP3 on R-ch, Making TP1 and TP4 positive respectively.
2. Adjust the RV101a and RV101b to obtain $15\text{mV} \pm 5\text{mV}$ reading on the meter.

Packing Material Parts List



Packing Material Parts List

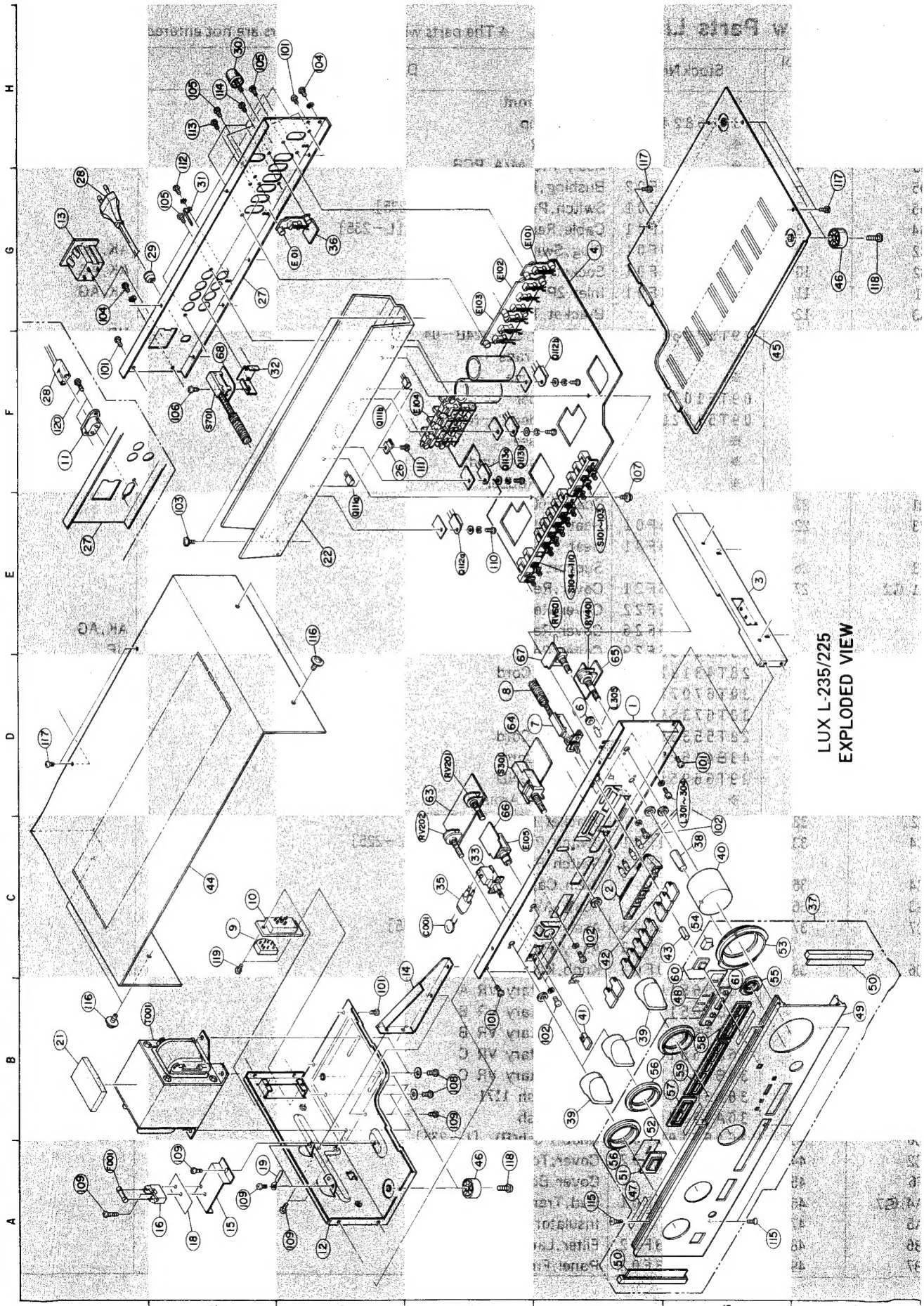
Index	Symbol No.	Stock No.	Description	Remarks
	201	68P65432F35	Owner's Manual	
	202	56B63425F11	S, Poly 620x480	
	203	56C56637F01	Packing Tray	
	204	56C60482F40	Carton, Packing [L-225]	
		56S60482F42	Carton, Packing	
	205	56A67614F01	Pad, Packing [L-235]	
	206	56A67599F01	Pad, Packing [L-235]	

Destination's Parts List

L-235/225

Symbol No.	Description	L-235					L-225
		SK 220V Europe	SD 220V W.Germany	AK 220V Europe Other's	AG 240V Australia England	UP 120V Canada	SK 220V Europe
7	SW, Push	40T57371F01	40T57371F01	40T57371F01	40T57371F01	40T57371F01	None Use
8	Wire, Flex	45T57373F01	45T57373F01	45T57373F01	45T57373F01	45T57373F01	None Use
9	Plug, SW P-2120	None Use	None Use	09T51830F01	09T51830F01	None Use	None Use
10	Socket, SW M-1615	None Use	None Use	09T51831F01	09T51831F01	None Use	None Use
11	Inlet, 2P	None Use	None Use	09T67078F01	09T67078F01	None Use	None Use
13	Outlet, AC	None Use	None Use	None Use	None Use	09T57066F01	None Use
16	Holder, Fuse	09T51074F01	09T51074F01	09T51074F01	09T51074F01	09T51828F01	09T51074F01
22	Heat Sink	07C56668F01	07C56668F01	07C56668F01	07C56668F01	07C56668F01	07C56635F01
27	Cover, Rear	15D56636F22	15D56636F22	15D56636F26	15D56636F26	15D56636F29	15D56636F21
28	AC Cord	28T43182P02	28T43182P02	30T67077F01	30T67359F01	28T55335P02	28T43182P02
29	Support, Cord	43B41625J02	43B41625J02	None Use	None Use	43B41625J02	43B41625J02
32	Bkt. PCB	*	*	*	*	*	None Use
37	Ass'y, Panel Front	01V68100F58	01V68100F58	01V68100F58	01V68100F58	01V68100F58	01V68100F48
38	Knob, Rotary A	36A66510F01	36A66510F01	36A66510F01	36A66510F01	36A66510F02	36A66510F01
39	Knob, Rotary B	36B66511F01	36B66511F01	36B66511F01	36B66511F01	36B66511F03	36B66511F01
40	Knob, Rotary C	36B66512F01	36B66512F01	36B66512F01	36B66512F01	36B66512F03	36B66512F01
43	Knob, Push B	36A57180F01	36A57180F01	36A57180F01	36A57180F01	36A57180F01	36A57180F01
49	Panel, Front	64D66508F04	64D66508F04	64D66508F04	64D66508F04	64D66508F04	64D66508F03
60	Frme, Knob 1163	07A57407F01	07A57407F01	07A57407F01	07A57407F01	07A57407F01	None Use
68	Ass'y, MC SW PCB	*	*	*	*	*	None Use
106	Scr, CUP M3x6	03C42723U01	03C42723U01	03C42723U01	03C42723U01	03C42723U01	None Use
113	Scr, T-Tite	03S44205G02	03S44205G02	03S44205G02	03S44205G02	03S44205G02	None Use
119	Screw	None Use	None Use	03S44205G03	03S44205G03	None Use	None Use
120	Screw	None Use	None Use	03S40012G98	None Use	None Use	None Use
S701	SW, Slide SSR2435	40T57372F01	40T57372F01	40T57372F01	40T57372F01	40T57372F01	None Use
T001	Trans, Power	25T66801F01	25T66801F01	25T56590F01	25T56590F01	25T56591F01	25T66799F01
F001	Fuse	65T42077U18	65T42077U18	65T42077U18	65T42077U18	65T52486F12	65T57086F07
Q112a, b	Transistor, Power	48T57132F03	48T57132F03	48T57132F03	48T57132F03	48T57132F03	48T57130F03
Q113a, b	Transistor, Power	48T57131F03	48T57131F03	48T57131F03	48T57131F03	48T57131F03	48T57129F03
204	Carton, Packing	56S60482F42	56S60482F42	56S60482F42	56S60482F42	56S60482F42	56S60482F40
205	Pad, Packing	56A67614F01	56A67614F01	56A67614F01	56A67614F01	56A67614F01	None Use
206	Pad, Packing	56A67599F01	56A67599F01	56A67599F01	56A67599F01	56A67599F01	None Use
F101a, b	Fuse	65T42077U19	65T42077U19	65T42077U19	65T42077F19	65T57086F09	65T57086F09
F102a, b	Fuse	65T42077U19	65T42077U19	65T42077U19	65T42077F19	65T57086F09	65T57086F09
L102a, b	Choke Coil	None Use	24T67516F01	None Use	None Use	None Use	None Use
L103a, b	Choke Coil	None Use	24T67516F01	None Use	None Use	None Use	None Use
C101a, b	Capacitor	08C42195G20	08T42081U25	08C42195G20	08C42195G20	08C42195G20	08T42081U01
C102a, b	Capacitor	None Use	08S40805F11	None Use	None Use	None Use	None Use
C104a, b	Capacitor	23T44501P27	23T44501P27	23T44501P27	23T44501P27	23T44501P27	23T44501P08
C109a, b	Capacitor	None Use	08T42081U05	None Use	None Use	None Use	None Use
C110a, b	Capacitor	None Use	08T42081U05	None Use	None Use	None Use	None Use
C111a, b	Capacitor	None Use	08T42081U05	None Use	None Use	None Use	None Use
C112a, b	Capacitor	None Use	08T42081U05	None Use	None Use	None Use	None Use
C113a, b	Capacitor	23T43197F17	23T43197F17	23T43197F17	23T43197F17	23T43197F17	None Use
C117a, b	Capacitor	08C42195G20	08C42195G20	08C42195G20	08C42195G20	08C42195G20	08C42081U01
C120a, b	Capacitor	23S41198U44	23S41198U44	23S41198U44	23S41198U44	23S41198U44	23S41198U37
C131	Capacitor	23S40657F43	23S40657F43	23S40657F43	23S40657F43	23S40657F43	23S40657F35
C136	Capacitor	None Use	08S44505P61	None Use	None Use	None Use	None Use
C137	Capacitor	None Use	08S44505P61	None Use	None Use	None Use	None Use
C138	Capacitor	None Use	08S44505P61	None Use	None Use	None Use	None Use
C139a, b	Capacitor	None Use	08S40656F13	None Use	None Use	None Use	None Use
C140a, b	Capacitor	None Use	08S40656F13	None Use	None Use	None Use	None Use
C150	Capacitor	None Use	21C45322G33	None Use	None Use	None Use	None Use
C151a, b	Capacitor	None Use	21C45322G28	None Use	None Use	None Use	None Use
R100a, b	Resistor	06S44593P43	06S44593P43	06S44593P43	06S44593P43	06S44593P43	None Use
R101a, b	Resistor	None Use	06S44593P57	None Use	None Use	None Use	None Use
R132a, b	Resistor	06T55175F47	06T00003L41	06T55175F47	06T55175F47	06T55175F47	06T55175F47
R134a, b	Resistor	06T55175F41	06T55175F41	06T55175F41	06T55175F41	06T55175F41	06T55175F27
R153a, b	Resistor	06T56661F54	06T56661F54	06T56661F54	06T56661F54	06T56661F54	06T56661F53
R160a, b	Resistor	None Use	06S44593P45	None Use	None Use	None Use	None Use
R161a, b	Resistor	None Use	06S44593P45	None Use	None Use	None Use	None Use
R162a, b	Resistor	None Use	06S44593P45	None Use	None Use	None Use	None Use
R163a, b	Resistor	None Use	06S44593P45	None Use	None Use	None Use	None Use
J01a, b	Resistor	Jumper	06S40150T45	Jumper	Jumper	Jumper	Jumper
C701a, b	Capacitor	21C45322G31	21C45322G31	21C45322G31	21C45322G31	21C45322G31	None Use
R701a, b	Resistor	06S44593P21	06S44593P21	06S44593P21	06S44593P21	06S44593P21	None Use

Exploded View



Exploded View Parts List

Note : * The parts whose parts numbers are not entered will not be supplied.

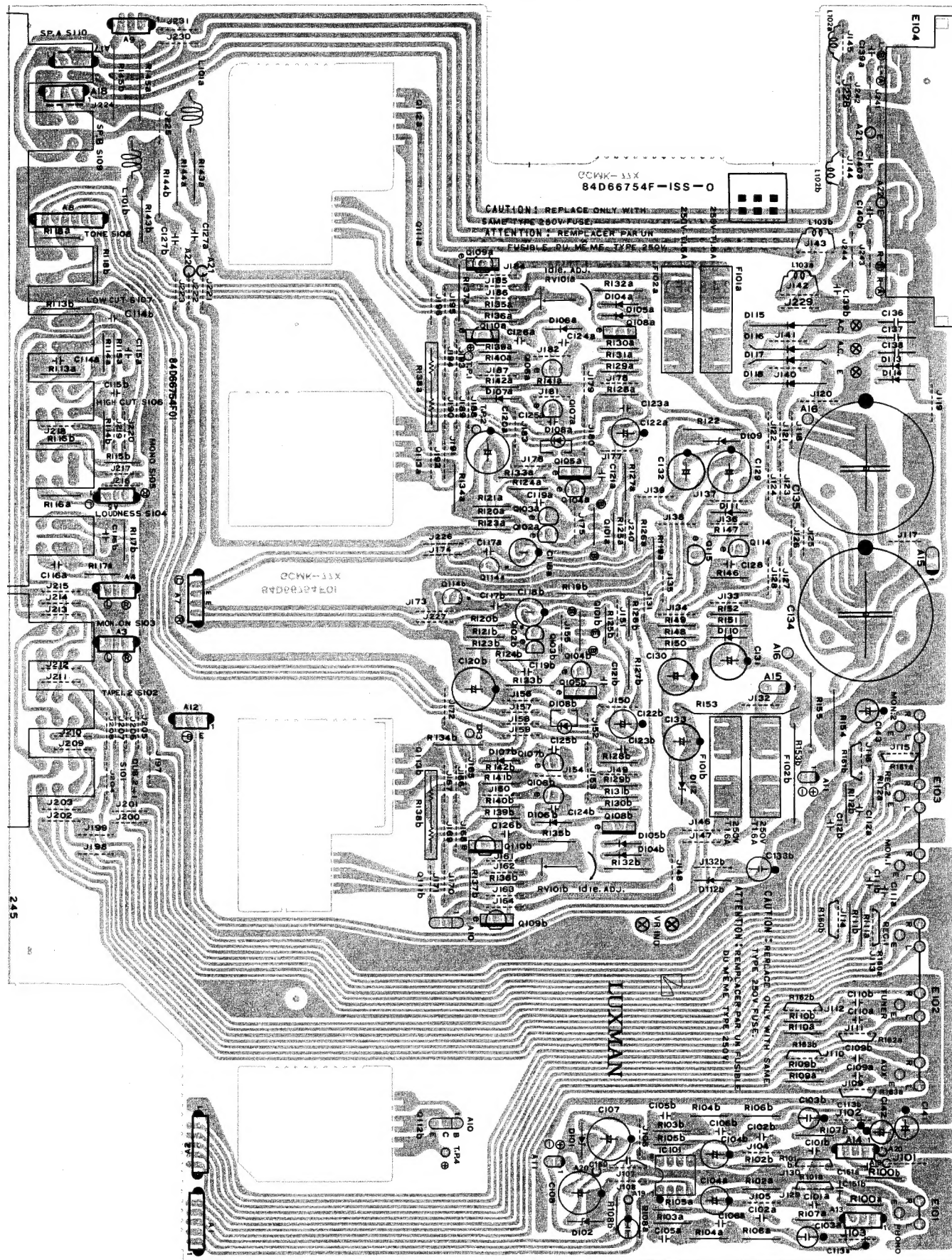
Index	Symbol No.	Stock No.	Description	Remarks
D5	1	*	Chassis Front	
C5	2	43A66824F01	Bush, Lamp	
E6	3	*	Bracket, R	
G5	4	*	Ass'y Pre M/A PCB	
D5	6	43A62016F02	Bushing, UZ1077-2	
D5	7	40T57371F01	Switch, Push SUFR1 [L-235]	
D4	8	45T57373F01	Cable, Remote SWR 1198 [L-235]	
C2	9	09T51830F01	Plug, Switch P-2120	AK, AG
C2	10	09T51831F01	Socket, Switch M-1615	AK, AG
F1	11	09T67078F01	Inlet, 2P	AK, AG
A3	12	*	Bracket, Trans	
G1	13	09T57066F01	AC, Outlet S2-724B-04	UP
C4	14	*	Bracket, Trans	
A2	15	*	Bracket, Fuse	
A2	16	09T51074F01	Fuse Holder	
		09T51828F01	Fuse Holder X-N1157	UP
A2	18	*	Spacer, Fuse	
A2	19	*	Lug, Wrap Around	
	20	*	Cushion, Rubber	
B1	21	*	Spacer, 60x34	
E3	22	07C56635F01	Heat Sink, 15 [L-225]	
		07C56668F01	Heat Sink, 30	
F3	26	*	Support, Tr	
E1, G2	27	15D56636F21	Cover, Rear [L-225]	
		15D56636F22	Cover, Rear	
		15D56636F26	Cover, Rear	AK, AG
		15D56636F29	Cover, Rear	UP
F1, G1	28	28T43182P02	Plug, AC Cord	SK, SD
		30T67077F01	Cord Set	AK
		30T67359F01	Cord Set	AG
		28T55335P02	Plug, AC Cord	UP
G2	29	43B41625J02	Support, Cord	SK, SD, UP
H2	30	29T66964F01	Terminal, GND	
G2	31	*	Lug, Wrap Around	
F2	32	*	Bracket, PCB [L-235]	
C4	33	40T45561F01	Switch Power (SDLIP) [L-225]	
		40T45561F02	Switch Power (SDLIP)	
C4	35	*	Bush, Cap	
G3	36	*	Ass'y AV Input	
C7	37	01V68100F48	Ass'y Panel Front [L-225]	
		01V68100F58	Ass'y Panel Front	
C6	38	36A66510F01	Knob, Rotary VR A	
		36A66510F02	Knob, Rotary VR A	UP
B5	39	36B66511F01	Knob, Rotary VR B	
		36B66511F03	Knob, Rotary VR B	UP
C6	40	36B66512F01	Knob, Rotary VR C	
		36B66512F03	Knob, Rotary VR C	UP
B5	41	36A56639F02	Knob, Push 1171	
C5	42	36A66836F02	Knob, Push	
C6	43	36A57180F01	Knob, Push(B) [L-235]	
C2	44	15C56629F02	Cover, Top	
F6	45	*	Cover, Bottom	
A4, G7	46	75A52969F01	Pad, Trann-leg	
A5	47	*	Insulator, 50x5	
B6	48	61A66858F02	Filter, Lamp	
B7	49	64D66508F03	Panel, Front [L-225]	

Index	Symbol No.	Stock No.	Description	Remarks
B7	49	64D66508F04	Panel,Front	
A5,B7	50	07B56624F03	Frame,Panel Side	
A5	51	61A56641F01	Crystal,Indicator	
B5	52	43A56628F01	Spacer,Power	
C6	53	07B56643F01	Frame,Knob 1140	
C6	54	61A61746F01	Lens 1020—WG1020	
C6	55	07A56645F01	Frame,Knob 1156	
A5,B5	56	07A56648F01	Frame,Knob	
B6	57	07C56907F01	Frame,Knob 1153	
B6	58	07B56646F01	Frame,Knob 1154	
B6	59	07C56647F01	Frame,Knob 1155	
C6	60	07A57407F01	Frame,Knob 1163 [L—235]	
B6	61	61A66643F01	Crystal,Acryl A	
D4	63	※	Ass'y,Tone Control PCB	
D4	64	※	Ass'y,Function SW PCB	
D5	65	※	Ass'y,VR Control PCB	
D4	66	※	Ass'y,HD Phone PCB	
D4	67	※	Ass'y,Balance Control PCB	
F2	68	※	Ass'y,MC SW PCB [L—235]	
B3,B4	101	03S44205G02	Screw,T-Tite M3x6	
B5,C5	102	03C40014G04	Screw,MCH M3x6	
E2	103	03C42723U02	Screw,CUP M3x8	
G1,H3	104	03S40036U18	Screw,T-Tite M3x8 T.L.	
G2,H2	105	03S40012G41	Screw,Tapping M3x8	
F2	106	03C42723U01	Screw,CUP M3x6 [L—235]	
F5	107	03S40018G02	Screw,Tapping M3x8	
B4	108	03S40036U01	Screw,T-Tite M4x8	
A1,A2	109	03S44205G02	Screw,T-Tite M3x6	
E4	110	03C40121T15	Screw,MCH M3x12	
F4	111	03S40012G28	Screw,Tapping M3x8	
H2	112	03S40036U18	Screw,T-Tite M3x8 T.L.	
H2	113	03S44205G02	Screw,T-Tite M3x6 [L—235]	
H2	114	03S40012G41	Screw,Tapping M3x8	
A5,A6	115	03S40012G55	Screw,Tapping M3x8	
B1,E3	116	03S40036U01	Screw,T-Tite M4x8	
D1,G7	117	03S44205G02	Screw,T-Tite M3x6	
A4,G7	118	03S44205G25	Screw,T-Tite M4x10	
C2	119	03S44205G03	Screw,T-Tite M3x8	AK,AG
F1	120	03S40012G98	Screw,Tapping M3x8 Flat	AK,AG
D4		18T56663F01	Volume 50KCx2	
C4		18T56663F01	Volume 50KCx2	
E5		18T68333F01	Volume 10KBx2	
E5		18T56666F01	Volume 250KW	
G3		09T57203F01	Plate,Phono 2P	
G4		09T57203F01	Plate,Phono 2P	
G4		09T57203F02	Plate,Phono 6P	
G4		09T57203F02	Plate,Phono 6P	
F4		09T51101F01	Terminal,SP	
C4		09T56010F01	Jack,Head Phone M1669	
E5		40T56653F01	Switch,Push SUN 33	
E5		40T56667F01	Switch,Push SUN73	
D4		40T56664F01	Switch,Rotary SRZ	
F2		40T57372F01	Switch,Slide SSR2435 [L—235]	
D6		65T66752F02	Lamp,Pilot ORG	
D6		65T66752F02	Lamp,Pilot ORG	
D6		65T66752F03	Lamp,Pilot GRN	
D6		65T66752F02	Lamp,Pilot ORG	
D5		65T66752F01	Lamp,Pilot	

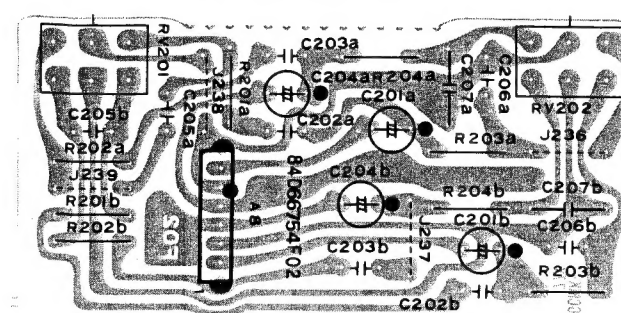
Index	Symbol No.	Stock No.	Description	Remarks
B2		25T66799F01	Trans Power [L—225]	
		25T66801F01	Trans Power	
		25T56590F01	Trans Power 230E	AK,AG
		25T56591F01	Trans Power 230U	UP
E3,F3		48T47682F02	Transistor 2SC1845 FA	
E4,F5		48T57130F03	Transistor 2SC3180 O,R [L—225]	
		48T57132F03	Transistor 2SC3181 O,R	
F4		48T57129F03	Transistor 2SA1263 O,R [L—225]	
		48T57131F03	Transistor 2SA1264 O,R	
C4		08T57437F09	Capacitor (Ac) 0.01uF	
A1		65T42077U18	Fuse Semko T1.6 A	
		65T57086F07	Fuse 51NM 2.0 —250 [L—225]	
		65T52486F12	Fuse MF61NM 5—125	UP

PCB

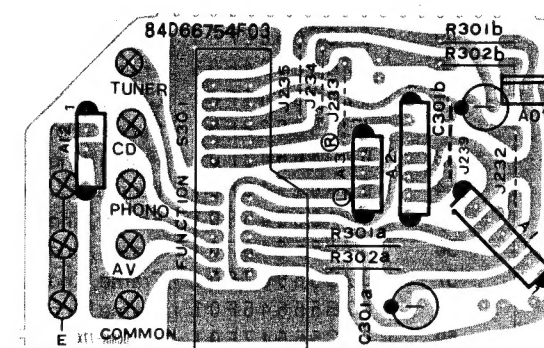
Pre Main Amp PCB



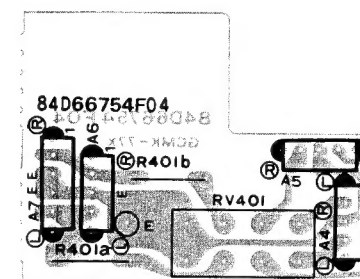
Tone Control PCB



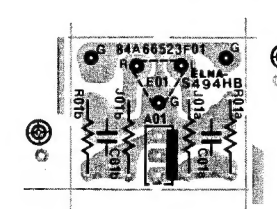
Function SW PCB



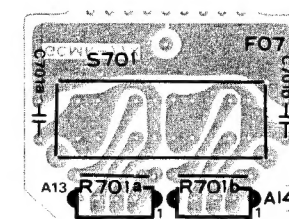
VR Control PCB



AV Input Terminal PCB



MC SW PCB



Pre Main Amp PCB Parts List

Symbol No.	Stock No.	Description
(Fuse)		
F101a,b	65T42077U19	Semko T2.0 A
F101a,b	65T57086F09	51NM3.0-250 [L-225] (UP)
F102a,b	65T42077U19	Semko T2.0 A
F102a,b	65T57086F09	51NM3.0-250 [L-225] (UP)
(Variable Resistor)		
RV101a,b	18C42061J28	470-B
(Coil)		
L101a,b	24T67516F01	1.1uH
L102a,b	24T67516F01	1.1uH (SD)
L103a,b	24T57516F01	1.1uH (SD)
(IC)		
IC101	51T52153F01	NJM2043D-D
(Transistor & FET)		
Q101a,b	48T53430F01	2SA979-G
Q102a,b	48S43525F05	2SC1815-Y,GR
Q103a,b	48S43525F05	2SC1815-Y,GR
Q104a,b	48S43525F05	2SC1815-Y,GR
Q105a,b	48T56658F01	2SC1904 B,V
Q106a,b	48S43525F02	2SC1815-Y
Q107a,b	48T51118F01	2SA1015-Y
Q108a,b	48T56657F01	2SA899 B,V
Q109a,b	48T56660F03	2SC2824 O,Y
Q110a,b	48T56659F03	2SA1184 O,Y
Q114	48T47682F02	2SC1845 FA
Q114a,b	48T52152F01	2SK30A-GR
Q115	48S43525F05	2SC1815-Y,GR
(Diode & Zener & LED)		
D1	48T51117F01	1S1553
D2	48T51117F01	1S1553
D3	48T51117F01	1S1553
D4	48T51117F01	1S1553
D101	48T52741F54	HZ18 -3L -AX
D102	48T52741F54	HZ18 -3L -AX
D104a,b	48T51117F01	1S1553
D105a,b	48T51117F01	1S1553
D106a,b	48T51117F01	1S1553
D107a,b	48T51117F01	1S1553
D108a,b	48T40955T01	TLR124 RED
D109	48T52741F62	HZ24 -2L -AX
D110	48T51117F01	1S1553
D111	48T44992F01	DS135D
D112a,b	48T52739F87	HZ20 -3
D113	48T44992F01	DS135D
D114	48T44992F01	DS135D
D115	48T51115F02	S3V20(4004)
D116	48T51115F02	S3V20(4004)
D117	48T51115F02	S3V20(4004)
D118	48T51115F02	S3V20(4004)
(Capacitor)		
C101a,b	08C42195G20	(St) 47pF 125V
C101a,b	08T42081U01	(Pp) 100pF [L-225]
C101a,b	08T42081U25	(Pp) 1000pF (SD)
C102a,b	08S40805F11	(Ce) 2200pF (SD)
C103a,b	23S40657F11	(EI) 22uF 16V
C104a,b	23T44501P08	(EI) 2.2uF 25V [L-225]

Symbol No.	Stock No.	Description
C104a,b	23T44501P27	(EI) 47uF 25V
C105a,b	08S40656F22	(My) 56000pF
C106a,b	08S40656F15	(My) 15000pF
C107	23S411198U42	(EI) 220uF 25V
C108	23S411198U42	(EI) 220uF 25V
C109,b	08T42081U05	(Pp) 150pF (SD)
C110a,b	08T42081U05	(Pp) 150pF (SD)
C111a,b	08T42081U05	(Pp) 150pF (SD)
C112a,b	08T42081U05	(Pp) 150pF (SD)
C113a,b	23T43197F17	(EI) 4.7uF 50V [L-235]
C114a,b	23T57007F02	(EI) 0.22uF 50V
C115a,b	08S40656F10	(My) 5600pF
C116a,b	08S40656F21	(My) 47000pF
C117a,b	08C42081U01	(Pp) 100pF [L-225]
C117a,b	08C42195G20	(St) 47pF 125V
C118a,b	23T44501P08	(EI) 3.3uF 25V
C119a,b	08S40656F06	(My) 2700pF
C120a,b	23S411198U37	(EI) 100uF 50V [L-225]
C120a,b	23S411198U44	(EI) 220uF 50V
C121a,b	08C42195G15	(St) 33pF 125V
C122a,b	23S40657F08	(EI) 100uF 10V
C123a,b	08T40655F06	(Mi) 3pF 50V
C123a,b	08T55119F03	(Mi) 3pF 50V
C124a,b	08S40656F05	(My) 2200pF
C125a,b	08S40656F05	(My) 2200pF
C126a,b	08S40656F01	(My) 1000pF
C127a,b	08S40656F21	(My) 47000pF
C128	08S40656F01	(My) 1000pF
C129	23S411198U37	(EI) 100uF 50V [L-225]
C129	23S411198U38	(EI) 100uF 63V
C130	23S40657F35	(EI) 47uF 50V
C131	23S40657F35	(EI) 47uF 50V [L-225]
C131	23S40657F43	(EI) 33uF
C132	23S40657F20	(EI) 47uF 25V
C133a,b	23S40657F26	(EI) 47uF 35V
C134	23T56654F01	(EI) 10000uF 50V
C135	23T56654F01	(EI) 10000uF 50V
C136	08S44505P61	(Ce) 10000pF (SD)
C137	08S44505P61	(Ce) 10000pF (SD)
C138	08S44505P61	(Ce) 10000pF (SD)
C139a,b	08S40656F13	(My) 10000pF (SD)
C140a,b	08S40656F13	(My) 10000pF (SD)
C141	23S40657F10	(EI) 10uF 16V
C142	23S40657F10	(EI) 10uF 16V
C143	23S40657F10	(EI) 10uF 16V
C150	21C45322G33	(Ce) 0.047uF (SD)
C151a,b	21C45322G28	1000pF 50V (SD)
(Resistor)		
R1	06S40150T96	(Rd) 20KΩ 1/4W
R2	06S40150T96	(Rd) 20KΩ 1/4W
R3	06S40150T96	(Rd) 20KΩ 1/4W
R4	06S40150T96	(Rd) 20KΩ 1/4W
R100a,b	06S44593P43	(Rd) 120Ω 1/4W [L-235]
R101a,b	06S44593P57	(Rd) 470Ω 1/4W (SD)
R102a,b	06S44594P08	(Rd) 56KΩ 1/4W
R103a,b	06S44594P08	(Rd) 56KΩ 1/4W
R104a,b	06S44593P81	(Rd) 4.7KΩ 1/4W
R105a,b	06S44594P38	(Rd) 1MΩ 1/4W

Symbol No.	Stock No.	Description
R106a,b	06S44593P29	(Rd) 33Ω 1/4W
R107a,b	06S44593P37	(Rd) 68Ω 1/4W
R108a,b	06S44593P57	(Rd) 470Ω 1/4W
R109a,b	06S44594P38	(Rd) 1MΩ 1/4W
R110a,b	06S44594P38	(Rd) 1MΩ 1/4W
R111a,b	06S44594P38	(Rd) 1MΩ 1/4W
R112a,b	06S44594P38	(Rd) 1MΩ 1/4W
R113a,b	06S44594P38	(Rd) 1MΩ 1/4W
R114a,b	06S44594P38	(Rd) 1MΩ 1/4W
R115a,b	06S44593P75	(Rd) 2.7KΩ 1/4W
R116a,b	06S44593P75	(Rd) 2.7KΩ 1/4W
R117a,b	06S44593P89	(Rd) 10KΩ 1/4W
R118a,b	06S44594P36	(Rd) 820KΩ 1/4W
R119a,b	06S44594P36	(Rd) 820KΩ 1/4W
R120a,b	06S44593P49	(Rd) 220Ω 1/4W
R121a,b	06S44593P49	(Rd) 220Ω 1/4W
R122	06T55177F75	(Rm) 2.7KΩ 1W
R123a,b	06S44594P22	(Rd) 220KΩ 1/4W
R124a,b	06S44593P49	(Rd) 220Ω 1/4W
R125a,b	06S44594P08	(Rd) 56KΩ 1/4W
R126a,b	06S44593P87	(Rd) 8.2KΩ 1/4W
R127a,b	06S44593P57	(Rd) 470Ω 1/4W
R128a,b	06S44593P87	(Rd) 8.2KΩ 1/4W
R129a,b	06S44594P06	(Rd) 47KΩ 1/4W
R130a,b	06S44593P99	(Rd) 27KΩ 1/4W
R131a,b	06S44593P99	(Rd) 27KΩ 1/4W
R132a,b	06T55175F47	(Rm) 180Ω 1/2W
R132a,b	06T00003L41	(Rd) 100Ω 1/2W (SD)
R133a,b	06T55175F17	(Rm) 10Ω 1/2W
R134a,b	06T55175F27	(Rm) 27Ω 1/2W [L-225]
R134a,b	06T55175F41	(Rm) 100Ω 1/2W
R135a,b	06S44593P73	(Rd) 2.2KΩ 1/4W
R136a,b	06S44593P61	(Rd) 680Ω 1/4W
R137a,b	06S55177F55	(Rm) 390Ω 1W
R138a,b	06T51107F01	(Rc) 0.22Ωx2 5W
R139a,b	06S44593P53	(Rd) 330Ω 1/4W
R142a,b	06S44593P53	(Rd) 330Ω 1/4W
R143a,b	06T55175F17	(Rm) 10Ω 1/2W
R144a,b	06T55177F17	(Rm) 10Ω 1W
R145a,b	06T55179F57	(Rm) 470Ω 2W
R146	06S44593P85	(Rd) 6.8KΩ 1/4W
R147	06S44593P33	(Rd) 47Ω 1/4W
R148	06S44593P93	(Rd) 15KΩ 1/4W
R149	06S44594P18	(Rd) 150KΩ 1/4W
R150	06S44594P08	(Rd) 56KΩ 1/4W
R151	06S44594P08	(Rd) 56KΩ 1/4W
R153a,b	06T56661F53	(Rm) 360Ω 3W [L-225]
R153a,b	06T56661F54	(Rm) 360Ω 3W
R154	06T55179F75	(Rm) 2.7KΩ 2W
R155	06T55179F75	(Rm) 2.7KΩ 2W
R160a,b	06S44593P45	(Rd) 150Ω 1/4W (SD)
R161a,b	06S44593P45	(Rd) 150Ω 1/4W (SD)
R162a,b	06S44593P45	(Rd) 150Ω 1/4W (SD)
R163a,b	06S44593P45	(Rd) 150Ω 1/4W (SD)

Tone Control PCB Parts List

Symbol No.	Stock No.	Description
(Capacitor)		
C201a,b	23S40657F16	(EI) 4.7uF 25V
C202a,b	08S40656F11	(My) 6800pF
C203a,b	08S40656F20	(My) 39000pF
C204a,b	23S40657F11	(EI) 22uF 16V
C205a,b	21S40655F31	(Ce) 560pF
C206a,b	08S40657F22	(My) 0.056uF
C207a,b	08S44503P30	(My) 0.27uF 50V
(Resistor)		
R201a,b	06S44593P71	(Rd) 1.8KΩ 1/4W
R202a,b	06S44593P53	(Rd) 330Ω 1/4W
R203a,b	06S44593P87	(Rd) 8.2KΩ 1/4W
R204a,b	06S44593P69	(Rd) 1.5KΩ 1/4W

Function SW PCB Parts List

Symbol No.	Stock No.	Description
(Capacitor)		
C301a,b	23T44501P06	(EI) 2.2uF 35V
(Resistor)		
R301a,b	06S44594P30	(Rd) 470KΩ 1/4W

VR Control PCB Parts List

Symbol No.	Stock No.	Description
(Resistor)		
R401a,b	06S44593P57	(Rd) 470Ω 1/4W

MC SW PCB Parts List (L-235)

Symbol No.	Stock No.	Description
(Capacitor)		
C701a,b	21C45322G31	10000pF 50V
(Resistor)		
R701a,b	06S44593P21	(Rd) 15Ω 1/4W

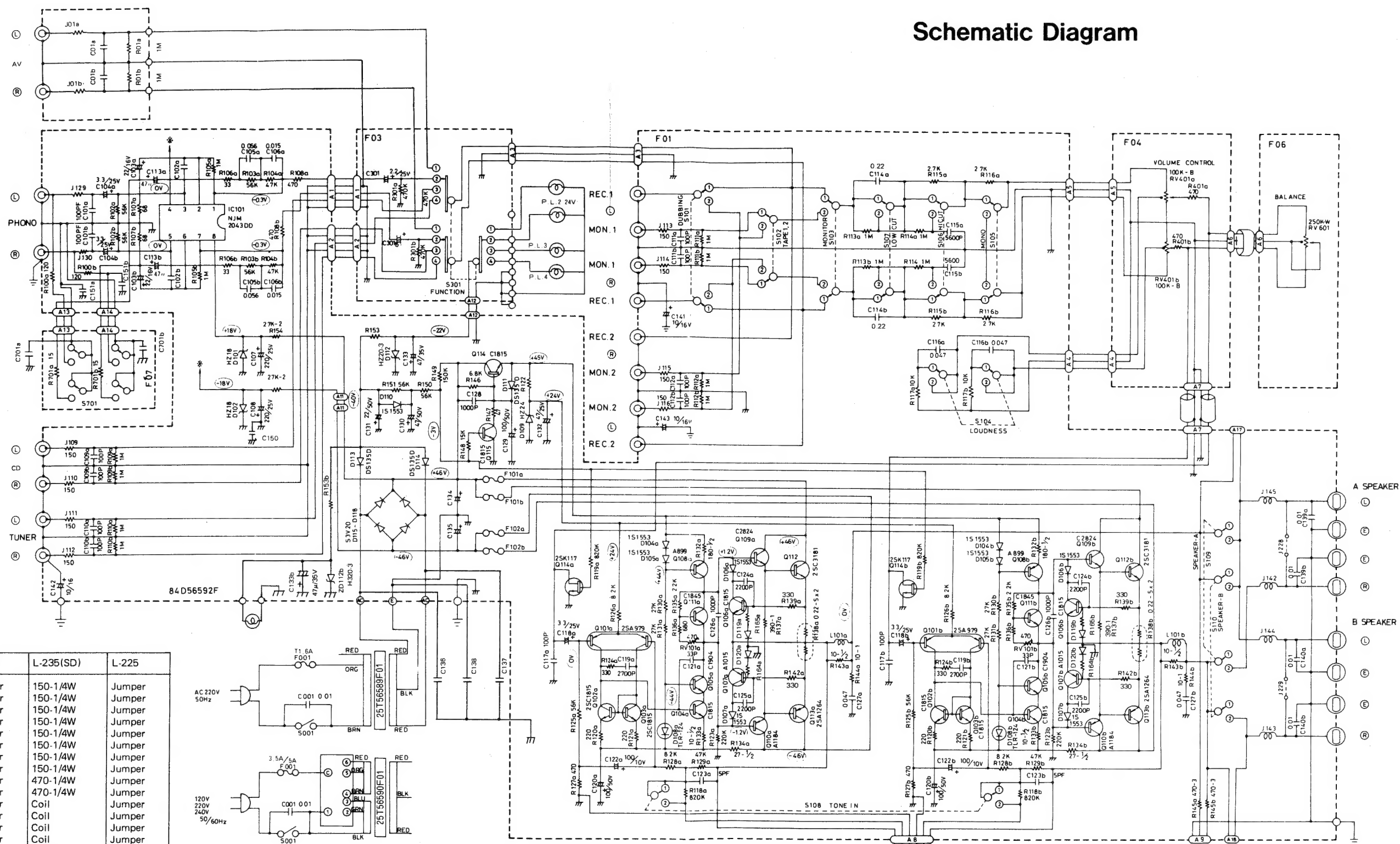
AV Input Terminal PCB Parts List

Symbol No.	Stock No.	Description
(Resistor)		
J1a,b		Jumper Wire
J1a,b	06S40150T45	(Rd) 150Ω 1/4W (SD)
(Resistor)		
R1a,b	06S40151T38	(Rd) 1.0MΩ 1/4W

Remarks

Resistor : RdCarbon
RfFrame Proof
RcCement
Capacitor : EIElectrolytic
CeCeramic
MyMylar
StStyrol
MiMica
PpPolypropylene

Schematic Diagram

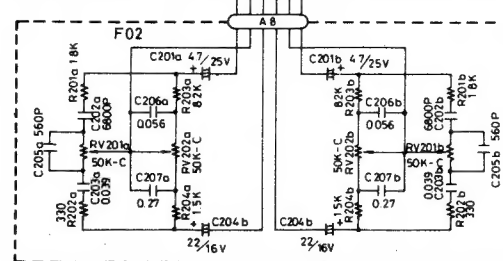


Symbol No.	L-235	L-235(SD)	L-225
J109	Jumper	150-1/4W	Jumper
J110	Jumper	150-1/4W	Jumper
J111	Jumper	150-1/4W	Jumper
J112	Jumper	150-1/4W	Jumper
J113	Jumper	150-1/4W	Jumper
J114	Jumper	150-1/4W	Jumper
J115	Jumper	150-1/4W	Jumper
J116	Jumper	150-1/4W	Jumper
J129	Jumper	470-1/4W	Jumper
J130	Jumper	470-1/4W	Jumper
J142	Jumper	Coil	Jumper
J143	Jumper	Coil	Jumper
J144	Jumper	Coil	Jumper
J145	Jumper	Coil	Jumper
C101a, b	47pF	1000pF	47pF
C102a, b	x	2200pF	x
C139a, b	x	0.01uF	x
C109a, b	x	150pF	x
C110a, b	x	150pF	x
C111a, b	x	150pF	x
C112a, b	x	150pF	x
C150		47000pF	x
C151a, b		1000pF	x
C136		0.01μ	x
C137		0.01μ	x
C138		0.01μ	x
C701a, b		10000pF	x
F102a, b	T2A	T2A	3A
F101a, b	T2A	T2A	3A
R153	360-3	360-3	330-3
S701			x
R701a, b	15 1/4	15 -1/4	x
R100a, b	120 1/4	120-1/4	x

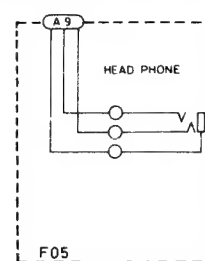
Remarks

1. Unless otherwise specified, all resistors are in OHM $\frac{1}{4}$ watt, all capacitors in micro farad.
2. Transistors and diodes may be replaced with any type having comparable ratings.
3. Due to continued improvements LUX reserve the circuit or specifications.

L-235/225

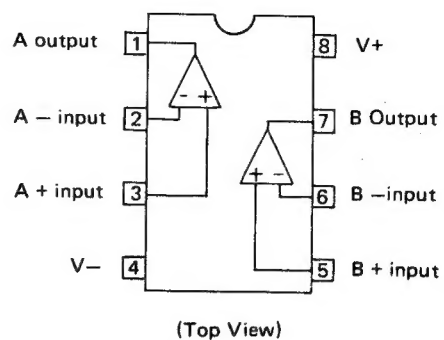


D119a, b 1S1553
D120a, b 1S1553

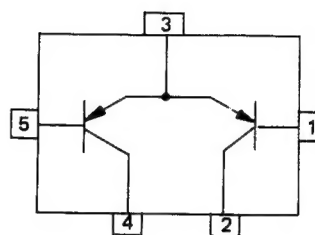


IC Handling Guide

NJM2043D-D
IC101
(Stock No. 51T52153F01)



TR, 2SA979G
Q101a,b
(Stock No. 48T53430F01)



Specifications

	L-235	L-225
Power Output:		
8 ohms, 1KHz	70Wx2	60Wx2
Distortion:	0.02%	0.02%
Input Sensitivity/Impedance:		
Phono MM	1.8mV/50K ohms	1.8mV/50K ohms
Phono MC	0.3mV/100 ohms	
Tuner, Monitor	160mV/40K ohms	160mV/40K ohms
AV, CD	160mV/40K ohms	160mV/40K ohms
S/N Ratio:		
Phono MM (IHF-A weighted, 5mV, input short)	90dB	90dB
Phono MC (IHF-A weighted)	67dB	—
Tuner, Monitor (IHF-A weighted)	107dB	107dB
AV/CD (IHF-A weighted)	107dB	107dB
Residual Noise:	0.5mV	0.5mV
Filter:		
High cut	7KHz (−6dB/oct)	7KHz (−6dB/oct)
Subsonic	20Hz (−6dB/oct)	20Hz (−6dB/oct)
Phono MM Overload:	130mV	130mV
Frequency Response:		
Phono MM	20Hz~20KHz (±0.5dB)	20Hz~20KHz (±0.5dB)
Tuner, Monitor	10Hz~100KHz (+0, −1.5dB)	10Hz~100KHz (+0, −1.5dB)
AV/CD	10Hz~100KHz (+0, −1.5dB)	10Hz~100KHz (+0, −1.5dB)
Tone Control:		
Treble	±8dB at 10KHz	±8dB at 10KHz
Bass	±8dB at 100Hz	±8dB at 100Hz
Loudness (Volume: −3dB):	+8dB at 100Hz	+8dB at 100Hz
Dimensions:	453(W)x317(D)x111(H) mm (17.8"x12.5"x4.4")	453(W)x317(D)x111(H) mm (17.8"x12.5"x4.4")
Weight:		
Net	7.3kgs	6.4kgs
Gross	8.5kgs	7.7kgs
Power Consumption:	120V/2.3A (CSA rated)	120V/2A (CSA rated)

Specifications and appearance design subject to change without notice.



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